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THE INSECT PEST SURVEY BULLETIN

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OUTSTANDING ENTOMOLOGICAL FEATURES IN THE UNITED STATES FOR OCTOBER, 1930

October developments in the grasshopper situation include defoliation of young citrus in many parts of Florida, serious destruction of new fall plantings of alfalfa and crimson and red clovers in Franklin and Winchester Counties, Tenn., and rather large populations building up in northern Nebraska, western North Dakota, and parts of Iowa.

In addition to the rather heavy infestation of the Middle Atlantic States by the fall armyworm, reported in the last number of the Survey Bulletin, the insect was quite generally prevalent and in many cases seriously destructive in Ohio, Indiana, Kentucky, Mississippi, and Texas.

A heavy growth of volunteer wheat, in southeastern Nebraska, which is now developed to such a size that it can not be easily destroyed by disking, makes possible a serious infestation of the Hessian fly in wheat next spring in that section. Moderate infestation is also reported from several counties in southern Iowa.

A heavy flight of chinch bugs to hibernation quarters took place in Illinois during early October. Practically all lawns of St. Augustine grass in Fairfax, S. C., have been seriously injured by this insect.

The corn ear worm is appearing in noticeable numbers in southern New Hampshire the first time since 1922. It is reported as quite prevalent throughout the remainder of the New England and Middle Atlantic States, causing a loss of at least one-third of the corn crop in the intensive truck-growing section of Long Island, N. Y. This heavy infestation extended westward as far as Michigan, Nebraska, Kentucky, and Indiana.

The velvetbean caterpillar, though appearing in rather large numbers in parts of Louisiana, is not extending so far westward as it did in the season of 1929.

A scarabaeid beetle (Bolbocerosoma bruneri D. & McC.) was found early in September damaging golf greens near Lincoln, Nebr., in the same manner as do common white grubs.

Codling moth injury is being reported as quite generally severe throughout the New England, Middle Atlantic, and South Atlantic States and westward over practically the entire Mississippi Valley Region. In Washington State, however, infestation is said to be much below normal.

Considerable damage by leafhoppers on deciduous fruits is reported from New England, West Virginia, Georgia, and Indiana.

Following extremely low temperatures last winter in parts of Washington State, woolly apple aphid infestations were much below normal this year.

The hot summer and mild fall are believed to have been responsible for a very marked increase of the San Jose scale population in central and southern Illinois.

The twig girdler is quite generally prevalent and causing some injury to pecan and English walnuts in parts of Virginia, North Carolina, and South Carolina.

The finding of the walnut husk fly at the mouth of Cajon Canyon in San Bernardino County, Calif., indicates that this insect extends over a much larger area in southern California than was originally suspected.

The citrus whitefly, Florida red scale, and purple scale are reported as being more abundant than usual for this season of the year. It is believed that the dry weather has hindered the development of the entomogenous fungi which normally partially control these pests.

A single specimen of the Colorado potato beetle was collected in Davis County, Utah, this year. This insect has not been observed in Utah for several years.

The potato tuber worm is much more prevalent on the Department of Agriculture's farm at Arlington, Va., than it has been for the past two years. Specimens of this insect were also received in potato tubers from Frederick County, Md., this year.

The southern green stink bug is reported as being very effectively controlled by the parasite Trichopoda pennipes Fab. in Florida.

Cabbage loopers were unusually prevalent in the Norfolk section of Virginia, southern Illinois, the whole of Mississippi, and parts of Texas.

The Mexican bean beetle is quite generally reported as either absent from fields or decidedly reduced throughout the New England and Middle Atlantic region. No reports of damage by this insect were received during the month of October.

A very unusual type of injury was observed in September in the Norfolk section of Virginia. A small black burrower bug (Pangaeus uhleri Sign.) was attacking new sprouted spinach, killing the young plants before they pushed through the soil. They were so numerous in one field that 43 acres had to be resown.

Thousands of acres of Douglas fir have been killed in the Colville National Forest in Washington State by the Douglas fir tussock moth. The serious outbreaks of this insect in central Idaho now seem to be controlled by parasites.

The mountain pine beetle is causing serious damage on both the east and west side of the Cascade Range in Washington State.

What is believed to be one of the largest outbreaks of the southern pine beetle is reported from the Smoky Mountain National Park in North Carolina and Tennessee.

The squash bug is reported from Payette and Gem Counties, Idaho.

The fifth case of infestation of cedar trees by the larvae of the moth Tortrix cockerellana Kearf. that has come to the attention of the entomologists of Nebraska was reported this year from Frontier County. The insect has been known to occur in the State for the past four years.

The fowl tick has been discovered in Brookhaven, Miss. The source of this infestation is not known.

The finding of Cleonus piger Scop., in Yates County, N. Y., again this year seems to indicate that this European pest is established in that State. In Europe the pest is known as a sugar-beet insect.

GENERAL FEEDERS

GRASSHOPPERS (Acrididae)

- Florida J. R. Watson (October 20): Grasshoppers are very abundant over all the State, many species stripping the leaves from young citrus.
- Michigan R. H. Pettit (October 20): Grasshoppers are very abundant.
- North Dakota J. A. Munro (October 23): Mr. Robert L. Shotwell, Assistant Entomologist, Bureau of Entomology, writes to me under date of October 17, in part, as follows: "I found a fair sprinkling of adults in all places that I visited last month even though no damage was reported. Given favorable conditions, these could lay enough eggs to produce quite a crop next year." This report refers particularly to the western part of North Dakota.
- Iowa H. E. Jaques (October 25): Grasshoppers have been moderately to very abundant throughout most of the State and still show up in large numbers on warm sunny days. They have had a very favorable time for egg-laying.
- Tennessee C. Benton (October 18): About the first part of September a farmer located 4 miles southwest of Winchester had about 20 acres of red clover destroyed by grasshoppers. During the latter part of September and the first half of October, total destruction of, or partial injury to, new fall plantings of alfalfa and crimson clover were reported from various parts of Franklin County.
- Nebraska M. H. Swenk (September 1-October 15): Damage by grasshoppers continued in parts of northern Nebraska until about the middle of September. (October 20): Grasshoppers are very abundant in northern Nebraska.
- Utah G. F. Knowlton (October 20): Grasshoppers are becoming less abundant now, and damage is decreasing rapidly.

FIELD CRICKET (Gryllus assimilis Fab.)

- Nebraska M. H. Swenk (September 1-October 15): Field crickets were very annoying as household pests in Scotts Bluff and Morrill Counties, especially in Bridgeport and Scottsbluff, during the month of September.
- Mississippi R. W. Harned (October 22): Complaints have continued to come during the past month in regard to the abundance of crickets. Apparently these insects are most abundant in the northwestern part of Mississippi. Some reports of their unusual abundance have also been received from the prairie section of northeastern Mississippi.

CUTWORMS (Noctuidae)

- Iowa H. E. Jaques (October 25): Cutworms have shown considerable fall activity in several of the counties in the northern half of the State.
- Virginia G. E. Gould (October 23): Cutworms of several species are abundant at present on spinach about Norfolk.
- Florida J. R. Watson (October 20): Cutworms are moderately abundant over all the State.
- Mississippi State Plant Board of Mississippi Press Release (October 27): Heavy damage to alfalfa by cutworms was reported from Washington County.

FALL ARMYWORM (Laphygma frugiperda S. & A.)

- Delaware L. A. Stearns (October 20): The fall armyworm is generally severe throughout the State and many complaints were received during early and mid-September.
- Pennsylvania T. L. Guyton (October 24): Probably the outstanding occurrence in the last month or so was the outbreak of fall armyworms in York and Cumberland Counties. This insect caused considerable damage in certain districts of these counties and in one instance destroyed a 7-acre field of fall barley. Numerous reports of damage to lawns were received.
- Virginia G. E. Gould (October 23): The fall armyworm has practically disappeared except for several small infestations on spinach. Only slight damage has been reported.
- Ohio T. H. Parks (September 30): An outbreak occurred on a farm in Butler County during September. The worms fed upon volunteer wheat that grew after wheat stubble ground was plowed and planted to alfalfa. They have been noticed for two weeks and have now almost destroyed the wheat in some spots of the field. They fed a little on the alfalfa but did not seriously injure it. Larvae are now pupating under clods and in the loose soil near the surface. A few larvae have tachinid eggs on them. (October 6): About two dozen larvae collected September 30 were brought to Columbus and fed with grass. These have now all pupated except one. The larvae were very dark in color and at first glance would not be taken for the fall armyworm. Identification of the insect was verified by Mr. Philip Luginbill. (October 28): Larvae collected September 30 in Butler County had pupated a few days later and moths were emerging by the middle of October. No parasites emerged from these larvae. On October 8 the county agent reported that the larvae had all pupated in the field.
- Indiana J. J. Davis (October 20): Definite reports were received during the second week in October from Tell City, Cannolton, and Corydon. In all cases damage to rye, wheat, and barley was serious and in some cases the worms totally destroyed these crops.

Kentucky

W. A. Price (October 23): Beginning October 2 and continuing through the present date the fall armyworm has been very destructive to rye, wheat, and alfalfa fields in central and western Kentucky.

Mississippi

R. W. Harned (October 22): On October 17, J. Whitaker, County Agent, reported that insects were causing serious damage to alfalfa in Washington County. He sent in one lot of worms that had destroyed in one spot 2 acres, and in hundreds of places spots from 10 to 50 feet in size. In the package that he sent were 10 worms. Three have been identified as Heliothis obsoleta Fab. and seven as Feltia annexa Treit. Another package of worms that he reported were destroying alfalfa contained three specimens of Heliothis obsoleta and five specimens of Laphygma frugiperda. (October 22): Serious injury to turnips was reported recently from Jackson and Meridian.

State Plant Board of Mississippi Press Release (October 27): The southern grassworm continued to be very destructive during the month, attacking pastures, lawns, gardens, soy beans, and alfalfa in various parts of the State. Early plantings of oats were completely killed by this pest in George County.

S. W. Clark (October 12): The fall armyworm is doing severe damage to beans in the Raymondville section, Willary County. (October 15): The fall armyworm is very abundant and doing severe damage to beans, beets, carrots, cabbage, cane, sudan grass, and lawns throughout the whole lower Rio Grande Valley.

WHITE GRUBS (Phyllophaga spp.)

New York

Staff of Geneva Experiment Station (September 29): White grubs are moderately abundant in Geneva.

Indiana

J. J. Davis (October 20): White grubs were reported attacking corn and potatoes at Frankfort, September 24. (October 20): White grubs are moderately abundant in the northwestern quarter of the State.

Michigan

R. H. Pettit (October 20): White grubs are very abundant.

Iowa

H. E. Jaques (October 25): Many of the counties in the usual brood region show heavy infestations.

Nebraska

M. H. Swenk (September 1-October 15): Injury to lawns, golf greens, and haymeadows continued to be reported from northeastern Nebraska until about September 20.

RUD SPIDER (Tetranychus telarius L.)

Washington

M. A. Yethers (August 1930): Unusually severe infestations of this mite in apple orchards in certain sections of the Wenatchee district. In certain orchards the trunks, branches, foliage, and fruit were covered with the mites and their webbing.

CEREAL AND FORAGE - CROP INSECTS

WHEAT AND RYE

HESSIAN FLY (Phytophaga destructor Say)

New York

Staff of Geneva Experiment Station (September 29): The Hessian fly is moderately abundant in Geneva.

Illinois

W. P. Flint (October 21): The extremely dry summer has greatly reduced the infestation in this State and except for a small area in southwest-central Illinois, there will apparently be little damage from the insect in the State this fall. Even in early-sown wheat infestation is very light.

Iowa

H. E. Jaques (October 25): Dallas, Cass, Adair, Warren, and Van Buren Counties report moderate to heavy infestations. Some of the neighboring counties report their presence in smaller numbers.

Nebraska

M. H. Swenk (September 1-October 15): In spite of the fact that the extremely hot and dry month of July destroyed a large percentage of the puparia, there remained quite a heavy infestation of viable puparia in the wheat stubble, and, with the coming of August rains, the Hessian fly emerged abundantly and attacked the heavy growth of volunteer wheat that had sprung up. Most of this volunteer growth has not been destroyed, and is now too large to destroy by disking. At the same time it is heavily laden with larvae and puparia which will form an extremely serious menace to the sown crop of wheat next spring, if not yet this fall through a possible supplementary fall brood the latter part of October.

APPLE GRAIN APHID (Rhopalosiphum prunifoliae Fitch)

New York

Staff of Geneva Experiment Station (October 20): Grain aphids are moderately abundant in Geneva.

Nebraska

M. H. Swenk (September 1-October 15): During the second week in October a rye field in northern Cass County was practically ruined by an abundance of the apple grain aphid. (October 20): The apple grain aphid is moderately abundant on rye in eastern Nebraska.

CORN

CHINCH BUG (Blissus leucopterus Say)

- South Carolina J. N. Tenhet (October 13): Practically all lawns of St. Augustine grass in the Fairfax section are being very seriously injured. The grass on many lawns has been killed outright.
- Indiana J. J. Davis (October 20): The chinch bug is common in the northeastern corner of the State.
- Illinois W. P. Flint (October 21): There were very heavy flights of chinch bugs to hibernation quarters during the early part of October. If the spring of 1931 is dry or moderately dry, this insect will undoubtedly cause damage in some six or ten Illinois counties.
- Iowa H. E. Jaques (October 25): The chinch bug is very abundant in Monroe County.

CORN EAR WORM (Heliothis obsoleta Fab.)

- New Hampshire P. R. Lowry (October 19): The corn ear worm is moderately abundant in the southern quarter of the State. This is the first time it has been at all common since 1922.
- Connecticut W. E. Britton (October 24): The corn ear worm has been more abundant in Connecticut this year than usual and has caused serious injury in several cases.
- Delaware L. A. Stearns (October 20): The corn ear worm is very abundant throughout the State.
- New York Staff of Geneva Experiment Station (October 20): The corn ear worm is very abundant in Chautauque and Erie Counties.
- C. R. Crosby (October): The corn ear worm injury is very severe all over Suffolk County - more so than in recent years. Caused the loss of at least one-third of the crop. (W. G. Beon)
- New Jersey T. J. Headlee (October 8): The corn ear worm is moderately abundant.
- Pennsylvania T. L. Guyton (October 24): The corn ear worm was very abundant in late roasting ears. Of course the dry weather we had here probably destroyed the chance of late roasting ears developing.
- West Virginia L. M. Peairs (October 20): The corn ear worm is very abundant in Morgantown.
- Virginia G. E. Gould (October 23): The corn ear worm was moderately abundant during September and October in snap-bean fields. Observations on beans picked around October 10 showed that a large percentage had been injured enough to lower their market value. Injury was also noted on tomatoes and corn.

- Florida J. R. Watson (October 20): The corn ear worm is moderately abundant, feeding mostly on beggarweed seed.
- Indiana J. J. Davis (October 20): Considerable injury to canning + tomatoes. Abundant the past month throughout the State on both field and sweet corn. A one-third grown larva was seen in Mitchell September 27, eating into an apple. Reports from Boonville and Scottsburg, October 13 and 14, respectively, mention serious losses to tomatoes, a large percentage being attacked. From Vincennes we have a report October 17 that they were attacking sweetpotatoes.
- Kentucky W. A. Price (October 23): The corn ear worm is very abundant on corn, tomatoes, and soy beans. After the maturity of the corn it has in many instances gone to the stalk and to other near-by crops.
- Michigan R. H. Pettit (October 20): The corn ear worm is moderately abundant.
- Iowa H. E. Jaques (October 25): The corn ear worm seems to have been more active than usual this year. Much of the late sweet corn suffered, while field corn in many counties shows unusual activity. The distribution was rather general throughout the State.
- Nebraska M. H. Swenk (September 1-October 15): The corn ear worm was reported as doing serious damage in cornfields in Nemaha County late in September and early in October.
- Mississippi G. I. Worthington (October 15): The corn ear worm is very abundant at Cleveland. Damage to tomatoes and late corn is unusually severe.
- F. A. Smith (October 20): The corn ear worm is very abundant in the northwestern part of the State.
- T. F. McGehee (October 18): Corn ear worms are very abundant at Holly Springs. Feeding in heads of sagrains.
- Utah G. F. Knowlton (October 20): The corn ear worm caused considerable damage to corn, and was observed damaging green tomatoes at Logan.
- Cuba U. C. Loftin (October 14): My impression is that Heliothis obsoleta can be found at Central Baragua at any time of the year on corn. Corn is planted during any month of the year and that which we get for table use is usually infested.

CORN ROOT WORMS (Diabrotica spp.)

- Nebraska M. H. Swenk (September 1-October 15): Adults of the Colorado

corn root worm (D. virgifera Lcs.), of the New Mexico corn root worm (D. filicornis Horn), and of the western corn root worm (D. longicornis Say) were plentiful in and about the corn-fields in the heavily infested area in southwestern Nebraska, which includes Redwillow, Hitchcock, Dundy, and the southern parts of Frontier and Chase Counties, until well into October. A campaign urging a general rotation of all fields that were in corn this year is now being put on, beginning with a farmers' tour of inspection of the damaged fields around McCook on October 17.

SOUTHERN CORN STALK BORER (Diatraea zeaecolella Dyar)

North Carolina C. H. Brannon (October 22): Very severe infestation on corn on State Hospital farm at Goldsboro, Wayne County.

SOY BEANS

VELVETBEAN CATERPILLAR (Anticarsia gemmatilis Hbn.)

Louisiana W. A. Douglas (October 2): The velvetbean caterpillars have not been found so far west as they were in 1929. Examinations have been made as far west as Nome, Tex., which is about 20 miles west of Beaumont, but no injury was found west of Crowley, La., along the Southern Pacific Railroad. Along this line, Nome marked the western limit of infestation last year; while this year the infestation ends at Crowley. North of Crowley, the infestation has been traced as far as Colfax, northwest of Alexandria, but the northern limit was not reached. Injury to soy beans is severe from Crowley to Colfax and near Lafayette and Jeanerette. The fungous disease Botrytis rileyi has been noted in several fields.

Cuba U. C. Loftin (October 14): I noticed some of the velvetbean caterpillars about the first of September and today I saw full-grown larvae feeding on the same bean plants. The infestation here has been very light this summer. Doubtless they are already in the United States before now.

COWPEA CURCULIO (Chalcodermus neneus Boh.)

Alabama J. M. Robinson (October 20): The cowpea curculio is very abundant in Auburn.

BEAN LEAF BEETLE (Cerotoma trifurcata Forst.)

Louisiana W. E. Hinds (October 29): Cerotoma trifurcata Forst. has been very abundant on soy beans and cowpeas and appears to have been quite largely responsible for preventing the setting of pods on cowpeas.

GRASS

A SCARABAEID BEETLE (Bolbocerosoma bruneri D. & McC.)

Nebraska

M. H. Swenk (September 1-October 15): Early in September it was found that the golf greens at the Shrine Club near Lincoln had been seriously damaged by the larvae of B. bruneri, which worked after the manner of common white grubs.

A SCARABAEID BEETLE (Ochrosidia immaculata Oliv.)

Indiana

J. J. Davis (October 20): White grubs (Cyclocephala immaculata) were injuring golf greens October 1 at Indianapolis.

SUGAR CANE

SUGARCANE BORER (Diatraea saccharalis Fab.)

Louisiana

W. E. Hinds (October 29): Diatraea saccharalis Fab. is unusually scarce. The damage to sugar-cane will be the lightest in many years.

F R U I T I N S E C T S

COTTON LEAF WORM (Alabama argillacea Hbn.)

Massachusetts

A. I. Bourne (October 2): Dr. Fernald reported that he observed the cotton leaf worm for the first time on the night of September 25-26, when the moths were present in Amherst in considerable numbers.

Connecticut

W. E. Britton (October 24): There was a heavy invasion of moths in Bridgeport and a lighter one at Greenwich and some other towns and cities the last days of September. I did not see any in New Haven.

West Virginia

L. M. Peairs (October 20): The cotton worm is reported in Morgantown. Moths migrating on September 25 and for a week after that date in moderate numbers.

Georgia

C. H. Alden (October 24): The cotton leaf worm is moderately abundant in the middle Georgia section.

Illinois

W. P. Flint (October 21): There has been a very heavy flight of moths during the early part of October. Very large numbers of these insects were noted during the first few days of the month and again on October 13 and 14.

Minnesota

A. G. Ruggles (October 10): Alabama argillacea was very abundant the last of September. Injury to the fruit of strawberry was seen at Eden Prairie.

- Alabama J. M. Robinson (October 20): The cotton leaf worm is very abundant in Auburn.
- Mississippi R. W. Harned (October 22): These insects are very abundant in practically every part of the State.

APPLE

CODLING MOTH (*Carpocapsa pomonella* L.)

- New York C. R. Crosby (October 20): Codling moth injury is very severe in the Hudson Valley this year. One large commercial orchard shows injury of about 60 per cent of the crop.
- Staff of Geneva Experiment Station (October 20): The codling moth is very abundant in western New York.
- New Jersey T. J. Herdlee (October 8): Codling moths are moderately abundant.
- West Virginia L. M. Peairs (October 20): The codling moth is very abundant in Berkeley County.
- Georgia C. H. Alden (October 24): The codling moth is very abundant in Cornelia; worst since 1925.
- Ohio T. H. Parks (October 28): Counts have just been completed in 94 orchards where the spray-service recommendations were followed. These men sprayed in the calyx, followed by two to four cover sprays, depending upon their location and the degree of worm infestation; 5.5 per cent of the fruit was infested or blemished by the larvae at harvest time, compared to 4.4 per cent damaged in 1929. The heaviest infestation was in southern Ohio where larvae continued to enter the fruit in September. In Lawrence County, where two-thirds of the growers were unable to apply all of the sprays owing to water shortage, approximately 50 per cent of the fruit was damaged by codling moth larvae. In the orchards which followed our schedule, only one spray was applied for the second brood of worms.
- Indiana J. J. Davis (October 20): Larvae were still entering fruit in southern Indiana a week ago.
- Illinois W. P. Flint (October 21): Third-brood and late second-brood codling moth larvae caused very heavy damage to apples this year. Surveys in southern and western Illinois conducted by Mr. Chandler and Mr. Bigger show infestations running as high as 58 per cent in some orchards in southern Illinois and 30 per cent in some orchards in western Illinois. These infestations occurred in commercial orchards which had received from five to seven applications of spray during the summer.

There were some striking differences in near-by orchards. In one case two orchards owned by the same person, sprayed with the same crews and rigs, containing the same varieties of trees of the same age and sprayed with the same schedule showed an infestation of 28 per cent in one case and 4 per cent in the other.

- Kentucky W. A. Price (October 23): The codling moth is very abundant. We collected 109 larvae from 8 bushels of wind-fall apples gathered in the station orchard at Lexington on October 22.
- Michigan R. H. Pettit (October 20): The codling moth is very abundant.
- Minnesota A. G. Ruggles (October 10): The codling moth is very abundant in Ramsey and Hennepin Counties.
- Missouri R. M. Jones (October 23): Apple harvest has been completed in some orchards and is in full swing in other orchards. The codling moth is moderately to very abundant. Late worms were more numerous this year than usual. The last egg deposition was recorded on October 3 and the last larvae were observed entering the fruit on October 15.
- Utah G. F. Knowlton (October 11): Injury to apples has been rather severe during the past season in many Cache Valley orchards.
- Washington M. A. Yothers (October 6): Infestation is much below that of average years. In one district where minimum winter temperature of -25° F. occurred, and where spring frosts destroyed almost all blooms, obviating the necessity for any spraying, the occasional apples still on the trees have been entirely free from codling moth infestation. Normally a few scattered apples would be very highly infested if left unsprayed. Doubtless minimum winter temperatures of -25° F. caused a high mortality of overwintering larvae.

LEAFHOPPERS (Cicadellidae)

- New Hampshire P. R. Lowry (October 19): Typhlocyba pomaria McA. very abundant in the southwestern part of the State. Leaves of apple have been badly stippled since August.
- Connecticut M. P. Zappe (October 23): Apple leafhoppers started in spring in about the usual numbers and gradually increased during the summer. At harvest time adults were very abundant causing injury to foliage and staining fruit. Owing to lack of rains the stains on fruit have not been washed off, and late varieties of fruit show much discoloration of fruit.
- West Virginia L. M. Peairs (October 20): Leafhoppers are very abundant in Berkeley County.

- Georgia O. I. Snapp (October 15): Leafhoppers have been unusually abundant in peach orchards this fall, working the foliage to the extent that it has taken on a silvery appearance.
- Indiana J. J. Davis (October 20): Erythroneura obliqua Say is moderately abundant on apple in southern Indiana. Apple leafhoppers (Typhlocyba sp.) were abundant the past month in orchards at Mitchell and Bedford. Noticeable excrement-spotting of the fruit as well as whitening of leaves.
- Dr. F. H. Lathrop, under date of September 20, writes from Vincennes: "The leafhopper (E. obliqua) is swarming in apple orchards of this section in unusual numbers. This species has been increasing in this section since midsummer. Considerable injury has been done in some orchards through removal of the chlorophyll from the leaves. Rain has removed most of the excreta from the fruit."
- Kentucky W. A. Price (October 23): The apple leafhoppers are moderately abundant.
- Michigan R. H. Pettit (October 20): Apple leafhoppers are very abundant.
- Missouri R. M. Jones (October 23): Apple leafhoppers are moderately abundant on apples at Marionville.
- WOOLLY APPLE APHID (Eriosoma lanigerum Hausm.)
- Washington M. A. Yothers (October 6): Woolly apple aphids are much less abundant than they are in average years, doubtless owing to colder winter weather last winter. In districts where minimum temperatures of -25° F. occurred, this season's woolly aphid infestation was extremely light. In the immediate vicinity of Wenatchee, where the minimum temperature of last winter was about -19° F., there was a greater infestation than where the minimum reached -25° F., but still much lighter than in normal years.
- SAN JOSE SCALE (Aspidiotus perniciosus Comst.)
- Georgia O. I. Snapp (October 20): The general infestation in this section (Fort Valley) at the present time is moderate.
- Illinois W. P. Flint (October 21): The dry, hot summer and open fall have been very favorable to an increase in numbers of the San Jose scale. While this insect suffered a very high winter mortality from the cold weather of the past winter, it has been able to come back so that slight to moderate infestations can be found in many commercial orchards in central and southern Illinois.

FLAT-HEADED APPLE TREE BORER (Chrysobothris femorata Oliv.)

South Carolina J. N. Tenhet (October 10): The flat-headed apple tree borer has very seriously injured a large young pecan grove. Trees four years old, and coming into bearing, seem as severely injured as one and two year trees. Many trees have been almost completely girdled.

Indiana J. J. Davis (October 20): The flat-headed borer was reported damaging apple at New Richmond September 28, maple at Jeffersonville September 21, and both apple and maple in Randolph County September 18.

APPLE SEED CHALCID (Syntomaspis druparum Boh.)

New Hampshire P. R. Lowry (October 19): Seedling apples and crab apples were badly infested with the apple seed chalcid September 20.

APPLE MAGGOT (Rhagoletis pomonella Walsh)

Minnesota A. G. Ruggles (October 10): The apple maggot is more abundant than usual, much damage resulting. One observer at Preston says no adults were seen until August 18, then they were very abundant.

EUROPEAN RED MITE (Paratetranychus pilosus Can. & Fark.)

New Hampshire P. R. Lowry (October 19): The European red mite is very abundant in many apple orchards. In some orchards 100 per cent of the calyx ends are covered with eggs.

PEACH

PEACH BORER (Aegeria exitiosa Say)

Georgia O. I. Snapp (October 20): We are still getting a few eggs at Fort Valley. Moths have been emerging as late as October 14.

Indiana J. J. Davis (October 20): The peach tree borer was reported from Tell City, LaPorte, Indianapolis, and Michigan City the latter part of September.

Michigan R. H. Pettit (October 20): The peach borer is very abundant.

Nebraska M. H. Swenk (September 1-October 15): The peach tree borer was reported as injurious in southern Clay County during the third week in September.

Utah G. F. Knowlton (October 20): The peach tree borer is damaging peach trees at Provo, Brigham City, and Willard. Damage occurs commonly in peach orchards throughout northern Utah.

LESSER PEACH BORER (Sesia pictipes G. & R.)

Georgia O. I. Snapp (October 20): The infestation is apparently heavier than usual in orchards which were winter-injured last fall or which have been somewhat neglected or carelessly handled. The large numbers of trees injured by low temperature last fall have contributed to the increased infestation.

ORIENTAL FRUIT MOTH (Laspeyresia molesta Busck)

Connecticut P. Garman (October 24): The oriental fruit moth is reported in New Haven and Hartford Counties. The situation is much improved over that prevailing a year ago. Natural enemies observed are Tricogramma minutum Riley, Macrocentrus ancylivora Roh., and Glypta rufiscutellaris Cress.

New York R. L. Payne through C. R. Crosby (October): Larvae of the first brood of oriental peach moths could be found in practically all sections of Orange County, especially in young orchards. The growth of young trees was checked in a number of orchards as a result of this pest, killing the young terminals.

Staff of Geneva Experiment Station (October 20): The oriental fruit moth is moderately abundant in western New York. (September 29): The oriental fruit moth is moderately abundant in Niagara County.

Pennsylvania T. L. Guyton (October 24): In counts made for oriental fruit moth infestation, the infestation at Harrisburg ran about 20 per cent on Elbertas and 50 per cent on Iron Mountain and Salway. In the Chambersburg district the counts on Elbertas ran from about 4 per cent to 39 per cent. Counts in all instances were made by cutting open all of the fruits from a particular tree or from a measured lot of the run of the tree.

West Virginia L. M. Peairs (October 20): The oriental fruit moth is moderately abundant in Berkeley County.

Kentucky W. A. Price (October 23): The oriental fruit moth is moderately abundant. The amount of twig injury has been very materially reduced this year, owing probably to an absence of peaches and to the prolonged drought, the latter resulting in a small amount of growth and in early hardening of the wood.

PLUM CURCULIO (Conotrachelus nenuphar Hbst.)

Connecticut M. P. Zappe (October 23): Curculios have caused a large amount of scars on fruit, especially the fruit on outside rows of orchard trees. Fruit also shows a considerable amount of fall feeding punctures.

New York

C. R. Crosby (October): Evidence of the plum curculio could be found in practically all peach orchards in Orange County. Orchards located near favorable harboring places for the beetles were severely infested. Considerable injury was found to be rather severe on a few trees in various parts of the county. (R. L. Payne)

Staff of Geneva Experiment Station (September 29): The plum curculio is very abundant in Geneva.

Georgia

O. I. Snapp (October 20): All adults have left peach orchards for hibernation. None have been collected in orchards during recent jarrings.

Indiana

J. J. Davis (October 20): The plum curculio is moderately abundant in general. Reported serious in plum orchards at Plymouth, October 13.

Missouri

R. M. Jones (October 23): The plum curculio is scarce at Marionville. Most orchards show only occasional stings on fruit.

WHITE PEACH SCALE (Aulecaspis pentagona Targ.)

Virginia

C. R. Willey (October 21): There seems to be a general infestation in the city of Richmond. Infestations have been observed recently in various sections of the city and some calls have been received asking for control remedies. It is being found on plum, cherry, and peach, chiefly on plum and sweet cherry.

Mississippi

W. L. Gray (October 16): The West Indian peach scale is moderately abundant in Adams County.

SHOT-HOLE BORER (Scolytus rugulosus Ratz.)

Ohio

T. H. Parks (October 28): According to the county agent, these beetles are doing much damage to peach trees in Fulton County.

QUINCE

QUINCE CURCULIO (Conotrachelus crataegi Walsh.)

New York

Staff of Geneva Experiment Station (September 29): The quince curculio is moderately abundant at Canandaigua and Hall.

CHERRY

SHOT-HOLE BORER (Scolytus rugulosus Ratz.)

- Maryland J. A. Hyslop (October 15): Several Japanese cherry trees near Silver Spring were killed by the shot-hole borer.
- Mississippi G. L. Bond (October 16): The shot-hole borer is reported in the Mize vicinity, and in fact it is doing some damage in all sections of Jones, Smith, Covington, Wayne, and Jasper Counties, especially to trees which have suffered from winter injury and peach-tree borers.
- Utah G. F. Knowlton (October 20): A few cases of shot-hole borer injury to young peach and cherry trees have been recently observed in northern Utah.

PLUM

PLUM GOUGER (Anthonomus scutellaris Lec.)

- Nebraska M. H. Swenk (September 1-October 15): A Platte County correspondent reported that the plum gouger (Coccotorus prunicida) had practically ruined her crop of plums during September.

CRANBERRY

CRANBERRY ROOT WORM (Rhabdopterus picipes Oliv.)

- New York Staff of Geneva Experiment Station (September 29): The cranberry rootworm is very abundant at Red Creek.

BLACKBERRY

A MITE (Eriophyes sp.)

- Oregon and Washington S. E. Crumb (September 1): Evergreen, Himalaya, Lawton, Eldorado, and Kittatinny blackberries are attacked, apparently indiscriminately by what appears to be E. gracilis Wal., and mites apparently of the same species have been found on at least two varieties of raspberry and on loganberry. Three separate infested areas are known--one in southern Oregon extending as far north as Yoncalla and west to Myrtle Point, another in the Willamette Valley as far south as Tangent and extending north to Vancouver, Wash., and a third in the Puyallup Valley about Puyallup and Sumner. The infestation is especially heavy about Woodburn, Oreg., where the blackberry crop is practically a total loss in many fields.

PECAN

PECAN CASE BEARER (Acrobasis juglandis LeB.)

Mississippi H. Gladney (October 15): The pecan leaf case bearer is moderately abundant at Ocean Springs.

PECAN CIGAR CASE BEARER (Coleophora caryaefoliella Clem)

Mississippi H. Gladney (October 15): The pecan cigar case bearer is moderately abundant at Ocean Springs.

TWIG GIRDLER (Oncideres cingulatus Say)

Virginia B. A. Porter (October 23): The twig girdler was reported as causing serious injury in a pecan grove in Mathews County, the majority of the small branches being cut off. (Specimens identified by W. S. Fisher).

C. R. Willey (October 21): The twig girdler is apparently more numerous this fall than usual. Specimens have been received from Henrico, Chesterfield, and Pittsylvania Counties. Reports of damage have come from Campbell, Hanover, and Dinwiddie Counties. Most of the damage has been done to English walnut and pecan trees. One specimen of girdled elm has been received and a wisteria which was very badly damaged has been observed.

North Carolina C. H. Brannon (October 23): Causing unusually severe damage to pecans this season.

Z. P. Metcalf (October 25): The twig girdler is proving to be a serious pest, not only to pecan trees but to various ornamental plants. More complaints have been received this fall than in previous years.

South Carolina J. N. Tenhet (October 10): Damage very noticeable in several groves of pecans at Fairfax.

PECAN WEEVIL (Balaninus caryae Horn)

Alabama J. M. Robinson (October 20): The pecan weevil is very abundant in central Alabama.

BLACK PECAN APHID (Myzocallis fumipennellus Fitch)

Mississippi State Plant Board of Mississippi Press Release (October 27): The black pecan aphid has been much less injurious this fall than last season, very little damage having occurred in most cases.

WALNUT

WALNUT HUSK FLY (Rhagoletis juglandis Cress.)

California

Monthly News Letter, Office of Los Angeles County Agricultural Commissioner, Vol. 12, No. 10 (October 15): That the walnut husk fly exists over a larger area in Southern California than it has heretofore been known to inhabit is indicated by the recent finding of larvae in walnuts growing at the mouth of Cajon Canyon in San Bernardino County. The discovery made by San Bernardino County agricultural inspectors places the pest 10 miles east of any previously known infestation. In addition the inspectors state that attacked nuts have been taken from isolated plantings of walnuts at points between the Chino-Pomona area, which has been known to be infested for some time, and the Cajon Pass infestation--a condition which makes it appear likely that the fly is general throughout the area..

CITRUS

A SWALLOWTAIL (Papilio cresphontes Cram.)

Florida

J. R. Watson (October 20): The "orange dog", as is usual at this time of the year, is doing considerable damage to citrus trees in nurseries.

CITRUS APHID (Aphis spiraeicola Patch)

Florida

J. R. Watson (October 20): The green citrus aphid is very scarce over all the State.

SOUTHERN GREEN STINK BUG (Nezara viridula L.)

Florida

J. R. Watson (October 20): The southern green stink bug is decidedly less abundant than during October of the past several years. This seems to be due to the great abundance of the parasite Trichopoda. The substitution of Crotalaria spectabilis for C. striata in many orange groves has also helped in this matter.

CITRUS WHITEFLY (Dialeurodes citri Ashm.)

Florida

J. R. Watson (October 20): The citrus whitefly is very abundant. It is rather more abundant than usual for October. Dry weather has hindered development of entomogenous fungi on this insect.

Alabama

J. M. Robinson (October 20): The citrus whitefly is moderately abundant at Spring Hill.

Mississippi

W. L. Gray (October 16): The citrus whitefly is very abundant on privet hedge in Adams County.

FLORIDA RED SCALE (Chrysomphalus ficus Ashm.)

Florida J. R. Watson (October 20): The Florida red scale is moderately to very abundant. It is rather more abundant than usual for October. Dry weather has hindered development of entomogenous fungi on this insect.

Alabama J. M. Robinson (October 20): The Florida red scale is moderately abundant at Spring Hill.

PURPLE SCALE (Lepidosaphes beckii Newm.)

Florida J. R. Watson (October 20): The purple scale is moderately to very abundant. It is rather more abundant than usual for October. Dry weather has hindered development of entomogenous fungi on this insect.

CITRUS RUST MITE (Eriophyes oleivorus Ashm.)

Alabama J. M. Robinson (October 20): The citrus rust mite is moderately abundant at Spring Hill.

Florida J. R. Watson (October 20): The citrus rust mite is moderately abundant.

TRUCK - CROP INSECTS

VEGETABLE WEEVIL (Listroderes obliquus Gyll.)

Mississippi H. Dietrich (October 20): Vegetable weevil adults were reported on turnips in a garden at Lucedale October 16.

GARDEN WEBWORM (Loxostege similalis Guen.)

Virginia G. E. Gould (October 23): The garden webworm is quite injurious to spinach throughout all of the Tidewater region.

Alabama J. M. Robinson (October 20): Turnip webworms are moderately abundant in Auburn.

Mississippi C. Hines (October 15): Garden webworms are moderately abundant at Yazoo City.

Nebraska M. H. Swenk (September 1-October 15): The garden webworm seriously damaged some alfalfa fields in central Johnson County during the last half of August.

CABBAGE WEBWORM (Hellula undalis Fab.)

Mississippi State Plant Board of Mississippi Press Release (October 27): The cabbage webworm destroyed several hundred acres of turnips planted for the canning factory at Lucedale.

R. W. Harned (October 22): Specimens were received from New Albany on September 26, where they were reported as seriously injuring turnip, cabbage, and collard plants, and from Meridian on September 29, where they were reported as causing serious injury to turnips.

FALSE CHINCH BUG (Nysius ericae Schill.)

Virginia

G. E. Gould (October 23): The false chinch bug is exceedingly abundant in the Norfolk region this fall and damage to turnips, mustard, and spinach has been reported.

POTATO AND TOMATO

COLORADO POTATO BEETLE (Leptinotarsa decemlineata Say)

Utah

G. F. Knowlton (October 20): The Colorado potato beetle has not been observed in Utah for several years; but one adult beetle was collected on the Davis County Experiment Farm at Farmington, July 17, by Mr. M. J. Janes.

POTATO FLEA BEETLE (Eoitrix cucumeris Harr.)

New York

C. R. Crosby (October): In general early broods of the flea beetles are less abundant than usual in Suffolk County. The late brood appeared in average abundance but did not cause much damage because of early death of potato vines. (W. G. Been)

TOBACCO FLEA BEETLE (Eoitrix parvula Fab.)

Oregon

W. W. Baker (September 14-16): Present on potatoes at Suver, Grants Pass, and Talent, but as these were the only places where potatoes were examined in western Oregon, it is likely that the insect is much more widely distributed.

HORNWORMS (Protoparce sp.)

New Hampshire

P. R. Lowry (October 19): Tomato hornworms have been much less abundant in southeastern New Hampshire this year than usual.

New York

C. R. Crosby (October): The tomato worms are very numerous in many fields of late tomatoes in Suffolk County causing severe damage in late fields. (W. G. Been).

POTATO-TUBER WORM (Phthorimaea operculella Zell.)

Maryland

J. E. Graf (October 9): Specimens received in potato tubers from Frederick County.

Virginia

T. L. Guyton (October 24): Recently a shipment of potatoes which were said to have originated on the Eastern Shore of Virginia were examined at Shippensburg, Pa., and were found to be heavily infested with the potato tuber moth. We do not know of this insect's occurrence in Pennsylvania other than in introduced potatoes.

E. W. Poos (October 16): Many times more abundant than during 1928 and 1929 when only a trace of this species was found in tobacco here (Arlington Farm). Some potato plants killed by this species (and drought) this year. Found in potato, tobacco, jimson weed, and *Datura innoxia*. This last host is probably a new record; at least for Virginia.

Maryland

L. N. Cory (October 30): The potato tuber moth is unusually abundant on the Eastern Shore of Maryland and has been reported from widely separated sections of the State - Frederick, Bonnie, Denton, Easton, and Snow Hill.

CABBAGE

IMPORTED CABBAGE WORM (*Pieris ranae* L.)

New York

Staff of Geneva Experiment Station (September 29): The cabbage butterfly is very abundant at Geneva and Hall.

C. R. Crosby (October): The green cabbage worms are normally abundant in Suffolk County.

Indiana

J. J. Davis (October 20): A report from Peru, dated September 29, advises us that cabbage worms have been very bad the past season on cabbage grown for canning factories.

Michigan

R. E. Pettit (October 20): The imported cabbage worm is moderately abundant.

Iowa

E. E. Jaques (October 25): The imported cabbage worm is very abundant in Carroll and Audubon Counties and moderately abundant in Mitchell County.

Mississippi

R. W. Harned (October 22): Serious injury to turnips was reported from Jackson on September 25.

R. E. Deen (October 13): The common cabbage worm has done considerable damage to mustard and turnips in the vicinity of Tupelo, causing total loss in many cases where spraying was not done.

DIAMOND-BACK MOTH (Plutella maculipennis Curt.)

New York C. R. Crosby (October): The diamond-back moths caused average damage in seed-beds; severe in fields in Suffolk County. (W.G. Been)

CABBAGE LOOPER (Autographa brassicae Riley)

Maryland B. W. Cory (October 30): The cabbage looper has been injurious to cabbage and has caused considerable defoliation to the seed white potato crop in Worcester County.

New York C. R. Crosby (October): Cabbage loopers are normally abundant in seed-beds and fields and are causing injury to plants late in season in Suffolk County. (W. G. Been).

Virginia G. E. Gould (October 23): The cabbage looper continued to be injurious in October to several cruciferous crops, especially broccoli, cabbage, and kale. At present the loopers seem to be disappearing around Norfolk.

Illinois A. P. Flint (October 21): There has been a severe outbreak on spinach in the large spinach-producing area in southern Illinois. Mr. Chandler reports that many of the loopers are now infected with wilt disease and that the outbreak is subsiding.

Mississippi R. W. Earned (October 22): Complaints from all sections of the State in regard to injury to turnips, cabbage, and collards have been received at this office during the past month. We have no record to indicate that these insects have previously been as abundant or as serious in Mississippi as they are at the present time.

Texas S. T. Clark (October 3): Autographa brassicae is doing considerable damage to cabbage, particularly seed beds at Meslaco.

CABBAGE MAGGOT (Hyalemyia brassicae Bouche)

New York C. R. Crosby (October): The root maggot ordinarily causes severe loss in about 10 per cent of seedbeds, but this year damage was very slight. Damage also was slight on early-set cabbage in Norfolk County. (W.G. Been).

Iowa H. L. Jaques (October 25): The cabbage maggot is very abundant in Winnebago County.

PARLEQUIN BUG (Larentia histronica Fahn)

Mississippi R. W. Earned (October 24): Specimens were received from Jackson on September 25, and from Union on October 5. In each case medium injury to turnips was reported. Other reports indicate that these insects are very abundant throughout Mississippi at the present time.

J. E. McEvilly (October 18): The harlequin bug is very abundant on collards and turnips in Pike and Amite Counties.

CABBAGE APHID (Brevicoryne brassicae L.)

Virginia

G. L. Gould (October 23): The cabbage aphid is exceedingly abundant at present in the Norfolk region and many growers claim they have the most severe infestation in years. A small field of rape was observed where many of the plants were wilting owing to the aphids, and the neighboring kale field had large colonies of aphids on practically every plant. Other crops severely infested are cabbage, rutabaga, and turnip.

GREEN PEACH APHID (Myzus persicae Sulz.)

Mississippi

R. W. Harned (October 22): A heavy infestation on collards was reported from Jackson on October 15.

STRAWBERRY

STRAWBERRY ROOT WORM (Paria canella Fab.)

Indiana

J. J. Davis (October 20): The rose root worm (Paria canella) was abundant and destructive to rose in the greenhouse at Vincennes October 14.

CYCLOMEN MITE (Tarsonemus pallidus Banks)

Washington

W. W. Baker (First two weeks in September, 1930): The cyclamen mite was found on overbearing varieties of strawberries in Puyallup, Sumner, and Tacoma. Progressives and Mastodons were the only varieties we were certain of but the mite was present in one field where we could not be sure of the variety. One patch of Progressives south of Tacoma which was abandoned three or four years ago was found to be infested though the others were comparatively young patches.

ASPARAGUS

ASPARAGUS BEETLE (Crioceris asparagi L.)

Iowa

H. E. Jaques (October 20): The asparagus beetle made its first appearance in Henry County this year. To us this has been very interesting since we have looked for it in particular every year for some considerable length of time. While the damage this year was nowhere marked, we found the beetles being brought in by several of our collectors.

BEANS

MEXICAN BEAN BEETLE (Epilachna corrupta Muls.)

- New York C. R. Crosby (October): The Mexican bean beetle is general and widespread in Suffolk County. Severe damage in a few fields. Second year noted on Long Island. Bad on limes. (W. G. Been)
- Staff of Geneva Experiment Station (September 29): The Mexican bean beetle is moderately abundant in Wallace.
- New Jersey T. J. Headlee (October 8): The Mexican bean beetle is moderately abundant.
- Delaware L. A. Stearns (October 20): The Mexican bean beetle is scarce at the close of the summer.
- West Virginia L. M. Peairs (October 20): The Mexican bean beetle is moderately abundant in Morgantown; hibernating in moderate numbers.
- Virginia G. E. Gould (October 23): The Mexican bean beetle is moderately abundant although becoming scarce in the fields about Norfolk. The number present in the fields this fall is greatly reduced over last year. A large percentage of beetles entering hibernation are newly emerged.
- Pennsylvania T. L. Guyton (October 24): The Mexican bean beetle nearly disappeared from the scene about Harrisburg this summer. In certain restricted localities where rain fell the beetles appeared on late-planted beans.
- Indiana J. J. Davis (October 20): The Mexican bean beetle is moderately abundant in general.
- Alabama J. M. Robinson (October 20): The Mexican bean beetle is scarce in northeastern Alabama.

A LEAFHOPPER (Empoasca mali LeB.)

- Florida J. R. Watson (October 20): The bean jassid seems on the whole to be rather less abundant than usual at this time of the year.
- Texas S. W. Clark (October 10): Infestations and abundance about normal, on beans at Weslaco.

BEAN APHID (Aphis rumicis L.)

- New York C. R. Crosby (October): The bean aphid is general and widespread on limes in Suffolk County but did not cause great loss. (W. G. Been)

MELONS

STRIPED CUCUMBER BEETLE (Diabrotica vittata Fab.)

Minnesota A. G. Ruggles (October 10): The striped cucumber beetle is very abundant on cucumber and squash on the University Farm.

Iowa H. E. Jaques (October 25): The striped cucumber beetle is particularly abundant in northern Iowa.

SPOTTED CUCUMBER BEETLE (Diabrotica duodecimpunctata Fab.)

Connecticut W. L. Britton (October 23): The spotted cucumber beetle is reported as being more abundant as compared with last month on flowers of dahlia, late gladiolus, and other plants at Hamden and Westbrook.

Florida J. R. Watson (October 20): The spotted cucumber beetle is very abundant.

North Carolina Z. P. Metcalf (October 25): The spotted cucumber beetle has been a serious pest of roses this year in spite of the fact that the larvae did practically no damage in the State. This latter fact is correlated, we believe, with the very dry weather at the height of its breeding season.

MELON WORM (Diaphania hyalinata L.)

Mississippi H. Dietrich (October 20): The melon worm and the squash vine borer (Melittia satyriniformis Fbn.) together have completely killed an acre of squash planted for fall harvest in George County. Adults of the melon worm were present in large numbers on October 18.

MELON APHID (Aphis gossypii Glov.)

Mississippi G. L. Bond (October 16): Melon aphids are abundant on late melons in the Moselle vicinity.

SQUASH BUG (Anasa tristis DeG.)

Idaho The News Letter (Idaho University), Vol. 14, No. 9 (October): It has been found that the squash bug is well established over a wide area in Partridge and Gem Counties and that the infestation is so extensive that eradication is not feasible. It is probable that it occurs also in adjoining counties. (Claude Wakeland)

SQUASH BEETLE (Epilachna borealis Fab.)

South Carolina P. K. Harrison (September 28): The squash lady-bird beetle is reported on pumpkin and gourd at Fairfax, the heaviest infestation on pumpkin.

TURNIP

TURNIP APHID (Rhopalosiphum pseudobrassicae Davis)

Virginia

G. E. Gould (October 23): The turnip aphid is abundant on turnip, rutabaga, rape, and mustard in the Norfolk district.

CARROT

CARROT WEEVIL (Listronotus latiusculus Boh.)

New York

C. R. Crosby (October): Some slight injury noted in the western part of Suffolk County. (W.G.Been)

SPINACH

A NEGRO BUG (Pangaeus uhleri Sign.)

Virginia

G. E. Gould (October 23): A very unusual type of injury was observed in September by a small black burrower bug. These insects were attacking the newly-sprouted spinach seed in the Norfolk district and would kill the plant before the cotyledons could push through the soil. After a plant was through the soil, the bugs would not interfere with it. Often the insects, both nymphs and adults or both, would cluster around a seed and roll it away. They were first discovered September 10 and disappeared about October 1. They were so numerous in one field that the entire 43 acres had to be resown.

HAWAIIAN BEET WEBWORM (Hymenia fascialis Cram.)

Virginia

G. E. Gould (October 23): The Hawaiian beet webworm is present on spinach throughout the Norfolk region. Little damage has been observed from this insect, but the moths are abundant in the fields.

SUGAR BEET

BEET LEAFHOPPER (Eutettix tenellus Baker)

Utah

G. E. Knowlton (October 20): Beet leafhoppers are becoming less abundant in the sugar-beet fields of northern Utah. Damage from curly-top has been severe in many parts of this State, and tonnages are low in the severely affected areas.

OKRA

A LEAF WORM (Anomis erosa Hbn.)

Louisiana

W. E. Hinds (October 29): Anomis erosa Hbn. has been taken commonly feeding on the foliage of okra at Baton Rouge. The life history and habits appear to be closely similar to those of Alabama argillacea, to which this species appears to be closely related.

FOREST AND SHADE-TREE INSECTS

FALL WEBWORM (Hyphantria cunea Drury)

New Hampshire

P. R. Lowry (October 19): The fall webworm infestation is normal in the southeastern part of the State.

Virginia

C. R. Willey (October 21): Fall webworms are usually very plentiful in this section (Richmond) especially in the swamps but have been noticeably absent this fall.

WALNUT CATERPILLAR (Datana integririma G. & R.)

South Carolina

P. K. Harrison (October 6): The walnut caterpillar is reported as attacking oak and pecan at Fairfax.

Mississippi

State Plant Board of Mississippi Press Release (October 27): Walnut caterpillars were generally scarce or only moderately abundant. It was observed, however, that walnut caterpillar eggs in Stone County were hatching without any parasitism, which may indicate an abundance of these pests in the southern part of the State next year.

BUFFALO TREEHOPPER (Ceresa bubalus Fab.)

Nebraska

M. H. Spenk (September 1 to October 15): A windbreak of Russian olives in Sarpy County was badly injured during the present season by the Buffalo tree-hopper.

ASH

ASH FLOWER GALL (Eriophyes fraxiniflora Belt)

Nebraska

M. H. Spenk (September 1 to October 15): A Lincoln County correspondent reported the ash trees in his yard seriously affected by the ash flower gall mite.

ELM

POPLAR BORER (Saperda calcarata Say)

Nebraska

M. H. Spenk (September 1 to October 15): Complaints of

damage to elm trees by the elm borer were received in about normal numbers during September.

EUROPEAN ELM SCALE (Gossyparia spuria Modeer)

Nebraska

M. H. Swenk (September 1 to October 15): At Grand Island, Hall County, the European elm scale was reported as again troublesome, not only on elms but on hackberries.

FIR

DOUGLAS FIR TUSsock MoTH (Hemerocampa pseudotsugata McD.)

Idaho

Monthly Letter of the Bureau of Entomology, No. 197 (September 1): Though large areas of timber have been destroyed in central Idaho, the outbreaks of the tussock moth Hemerocampa pseudotsugata McD. have been successfully reduced through the activity of beneficial insects. In some areas there was a little feeding by this moth in 1930, but it is believed that the epidemic in all areas is at an end.

Washington

Monthly Letter of the Bureau of Entomology, No. 197 (September): The Douglas-fir tussock moth has killed thousands of acres of fir on the Colville National Forest.

HACKBERRY

HACKBERRY NIPPLE GALL (Pachypsylla celtidis-mamma Riley)

Nebraska

M. H. Swenk (September 1 to October 15): A Sheridan County correspondent reported the leaves on his hackberry trees to be considerably deformed by hackberry nipple galls.

JUNIPER

JUNIPER SCALE (Diaspis carueli Targ.)

Ohio

E. W. Mendenhall (October 7): Juniperus pfitzeriana cuttings in one of the greenhouses at Painesville are badly infested with the juniper scale. The juniper stock in the nursery is badly infested and in this way it has been carried into the greenhouse.

MAPLE

MAPLE LEAF SPOT (Cecidomyia ocellaris O. S.)

Mississippi

R. W. Harned (October 22): Maple leaves infested with galls caused by Cecidomyia ocellaris were received on October 3 from Pittsboro.

OAKOAK SPANWORM (Ellopie somnaria Hlst.)

Oregon

Wm. W. Baker (September 14): Oaks near Amity and south of there for several miles were seriously defoliated by some species of looper, likely Ellopie somnaria Hlst. Mature larvae, pupae, and moths were present.

A LEAF MINER (Lithocolletis sp.)

Mississippi

R. W. Harned (October 22): Live oak leaves infested with leaf miners belonging to the genus Lithocolletis were received from Laurel, on September 23. The correspondent indicated that practically all of the live oak trees in Laurel were infested with these insects.

PINEA FLAT-HEADED BORER (Chrysobothris floricola Gory)

Mississippi

Henry Dietrich (October 20): Chrysobothris floricola is extremely abundant in southeastern Perry County injuring young longleaf pines by chewing the needles near the base, after which the outer part turns brown and falls down. Chalcophora virginianensis Drury and C. liberta Germ. are also very common on young pines but I could not observe them actually chewing needles in nature or breeding cages while I observed C. floricola in both cases. All Buprestidae bred up in slash of long leaf pine immediately adjoining, cut last spring and summer.

SOUTHERN PINE BEETLE (Dendroctonus frontalis Smm.)

Tennessee

and

North Carolina

Monthly Letter of the Bureau of Entomology, No. 197 (September): What is believed to be one of the largest outbreaks in recent years was found in Smoky Mountain Park. Of particular interest was an outbreak of this beetle found in spruce. This is the first record for this host in many years. Many local outbreaks in pine were found in various localities in western North Carolina and in eastern Tennessee.

MOUNTAIN PINE BEETLE (Dendroctonus monticolae Hopk.)

Washington

Monthly Letter of the Bureau of Entomology, No. 197 (September): The mountain pine beetle is causing severe damage to the pines both east and west of the Cascade Range.

WHITE PINE WELVIL (Pissodes strobi Peck)

Virginia

C. R. Willey (October 21): Specimens of infested white pine and Norway spruce collected in Fairfax County, white pine in Botetourt County and Austrian pine from Augusta County--all specimens from nurseries.

PINE LEAF SCALE (Chionaspis pinifoliae Fitch)

Ohio E. W. Mendenhall (September 26): I find an outbreak on pines on private property in Sidney, Shelby County.

SCOTCH PINE LECANIUM. (Toumeyella numismaticum P. & McD.)

Wisconsin E. L. Chambers (October 30): Jack pine has been severely injured in many sections of the State by the Scotch pine scale, a pest which has never previously been recorded as doing any extensive injury in Wisconsin's forests.

SPRUCE

SPRUCE NEEDLE MINER (Epinotia nanana Tr.)

Maine Monthly Letter of the Bureau of Entomology, No. 197 (September): J. E. Hood and J. V. Schaffner, jr., spent September 23 and 24 in vicinity of Boothbay and Pemaquid, Me., making observations on the occurrence of the so-called spruce webworm, Epinotia nanana Tr.

SPRUCE LEAF MINER (Recurvaria piceaella Kearf.)

Nebraska H. H. Swenk (September 1 to October 15): Investigation during the past summer showed that some Colorado blue spruce trees in Lincoln were in a number of instances seriously infested.

SPRUCE BUDWORM. (Harmoloma funiferana Clem.)

Wisconsin E. L. Chambers (October 30): Large tracts of spruce, pine, and balsam in Douglas and Bayfield Counties have been defoliated by the spruce budworm.

INSECTS AFFECTING GREENHOUSES AND
ORCHARD PLANTS AND TREES

BLISTER BEETLES (Meloidae)

Virginia J. R. Milley (October 31): We have had no complaints about these pests, which is unusual, especially during the dahlia blooming season.

AN APHID (Prociphilus erigeronensis Thomas)

Indiana J. J. Davis (October 30): Root aphids (P. erigeronensis) reported destructive to dahlia, aster, and other flowering plants at Greenfield the past season.

OYSTER-SHELL SCALE (Lepidosaphes ulmi L.)

Indiana

J. J. Davis (October 20): The oyster-shell scale was reported destructive to peony at Frankfort, September 26, and to lilac at Brownsburg, September 30.

CITRUS MEALYBUG (Pseudococcus citri Risso)

Ohio

E. W. Mendenhall (October 10): I find that the variegated English ivy is subject to the mealybugs (Pseudococcus citri Risso). The ivy in one of the greenhouses in Painesville is badly infested.

Indiana

J. J. Davis (October 20): Mealybugs were reported damaging chrysanthemum and other plants at Evansville, Churubusco, and Richmond, September 27 to October 8.

OLEANDER SCALE (Aspidiotus hederæ Vell.)

Ohio

E. W. Mendenhall (October 8): I find that the variegated ivy plants in one of the greenhouses in Painesville, Lake County, are infested with oleander scale.

CAMELLIA

(LEPIDOSAPHES CAMELLIÆ BOISD.)

SCALES (Lepidosaphes camelliæ Boisd.)
(Fiorinia fioriniæ Targ.)

Mississippi

R. F. Colmer (October 18): Fioriniæ scale (F. fioriniæ) is abundant on Camellia japonica in the vicinity of Moss Point and Pascagoula. Also Camellia scale L. camelliæ.

A TORTRICID (Tortrix cockerellana Kearf.)

Nebraska

M. H. Stenk (September 1 to October 15): A case of infestation of cedar trees with the larvae of Clepsis cockerellana, the fifth such instance during the past four years, was found in Frontier County early in September.

CORYNTHUM

CORYNTHUM LACEBUG (Corythucha marmorata Uhl.)

Mississippi

D. J. Grimes (October 20): Corythucha marmorata is slight to abundant on chrysanthemums at Durant and Lexington.

COLEUS

A MEALYBUG (Phenacoccus gossypii Tns. & Ckll.)

Mississippi

Henry Dietrich (October 30): Mealybugs destroyed coleus at several places in Lucedale.

CREPE MYRTLE

CREPE MYRTLE APHID (Myzocallis kahawaluokalani Kirk.)

Mississippi

R. W. Harned (October 22): Crepe myrtle leaves infested with this aphid were received from Canton on October 7.

DEODAR

A WEEVIL (Pissodes sp.)

North Carolina

C. H. Brannon (October 15): This insect is causing severe damage to deodar in Robeson County. (Determined by W. Middleton.)

EUONYMUS

EUONYMUS SCALE (Chionaspis eucnymi Comst.)

North Carolina

E. P. Metcalf (October 25): The euonymus scale is a more serious pest this fall than usual.

FERN

HEMISPHERICAL SCALE (Saissetia hemisphaerica Targ.)

Indiana

J. J. Davis (October 30): The fern scale (apparently Saissetia hemisphaerica) was reported as very abundant on house sword fern at Kokomo, October 6.

LANTANA

GREENHOUSE ORTHEZIA (Orthezia insignis Dougl.)

Mississippi

R. W. Harned (October 22): A heavy infestation of Orthezia insignis on lantana was reported by a correspondent at Meridian, on October 4.

LILAC

LILAC BORER (Podosesia syringae Harr.)

Nebraska

M. H. Swenk (September 1 to October 15): At Norfolk, Madison County, early in September the lilac borer was reported as having destroyed a number of fine lilac bushes.

NARCISSUS

LESSER BULB FLY (Eumerus strigatus Fallen)

Ohio

E. W. Mendenhall (September 26): There is a good deal of infestation by the lesser bulb fly found in narcissus at Dayton, Montgomery County. (October 7): I find the name "lesser bulb fly" popularly given to two species of bulb-flies, E. strigatus Fallen and E. tuberculatus Rond., in narcissus bulbs in a nursery in Painesville (Lake County).

NARCISSUS BULB FLY (Merodon equestris Fab.)

Ohio

E. W. Mendenhall (October 7): The larger bulb-fly is found in narcissus bulbs in a nursery at Painesville (Lake County).

BULB MITE (Rhizoglyphus hyacinthi Boisd.)

Ohio

E. W. Mendenhall (October 7): The bulb mites are quite numerous in the narcissus bulbs in a nursery at Painesville (Lake County).

Mississippi

Henry Dietrich (October 20): The bulb mite is common on daffodil bulbs on farm in southern George County.

INSECTS ATTACKING MAN AND

DOMESTIC ANIMALS

MAN

MOSQUITOES (Culicinae)

Mississippi

Henry Dietrich (October 20): Shortly after rains, mosquitoes became very numerous and annoying about Lucedale. Had been very scarce all summer. During drought all sink holes and roadside ditches dried up. Streams that formed pools had no larvae present, owing to fish. After heavy and continuous rains in September sink holes and roadside ditches were rain-filled and still are.



POULTRY

FOWL TICK (*Argas miniatus* Koch)

Mississippi R. W. Harned (October 22): Specimens of the fowl tick were received from Brookhaven during the past week. Details in regard to the extent of this infestation or its origin have not been learned.

HOUSEHOLD AND STORED -

PRODUCT INSECTS

TERMITES (*Reticulitermes* spp.)

Indiana J. J. Davis (October 20): Termites reported damaging dwelling at Evansville, September 30.

CURCULIONID (*Cleonus piper* Say)

New York C. R. Crosby (October 20): I am again beginning to receive specimens from Yates County. Four specimens have come in so far this fall.

CADELLE (*Tenebroides mauritanicus* L.)

Indiana J. J. Davis (October 20): The cadelle larvae (*Tenebroides mauritanicus*) were received from Crawfordville, September 30, where they were reported infesting wheat.

RICE WEEVIL (*Calendra oryzae* L.)

Mississippi G. L. Bond (October 16): The rice weevil is especially abundant in cornfields in the vicinities of Waynesboro and Laurel.

State Plant Board of Mississippi Press Release (October 27): The rice weevil or ordinary corn weevil was reported as very abundant in cornfields in the southern part of the State and the Plant Board has advised early harvesting and fumigation.

MUSHROOM MITE (*Tyroglyphus lintheri* Osb.)

Kentucky W. H. Price (October 25): Eight hundred old Kentucky hams were found to be pretty well inhabited by a mite, *Tyroglyphus lintheri* Osb.